

CLAIMS

What is claimed is:

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1. In a mass storage unit, a method for organizing and accessing stored data representing audio and visual data, said method comprising the steps of:

a) associating an object with said stored data;

b) deriving a unique object identifier for said object and assigning said unique object identifier to said object, wherein said unique object identifier is not based on a physical location of said stored data within said mass storage unit;

c) maintaining said object in a hierarchical organization with other objects, wherein said hierarchical organization comprises an object list, said object list containing said unique object identifier and other unique object identifiers for said other objects; and

d) accessing said object using said unique object identifier.

2. The method of Claim 1 wherein step b) comprises the step of using an embedded system of said mass storage unit to derive and assign said unique object identifier.

3. The method of Claim 1 wherein step b) comprises the step of including in said unique object identifier a date and time corresponding to when said unique object identifier is derived such that said unique object identifier is unique to said mass storage unit.

4. The method of Claim 2 wherein step b) further comprises the step of including in said unique object identifier an identification number unique to said mass storage unit such that said unique object identifier is unique for a plurality of mass storage units.

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5. The method of Claim 1 wherein step c) further comprises the step of creating a table of contents containing a list of objects associated with data stored on said mass storage unit.

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6. The method of Claim 1 wherein step c) further comprises the step of associating a first object to a second object using a unique object identifier for said second object.

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7. The method of Claim 6 wherein step d) comprises the steps of:
locating said first object using a unique object identifier for said first object; and
locating said second object using said unique object identifier for said second object.

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8. The method of Claim 1 wherein step d) comprises the step of locating said object using descriptive data, wherein said object contains said descriptive data for describing said stored data.

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9. The method of Claim 1 further comprising the steps of accessing said object and executing a command using said object.

10. The method of Claim 9 wherein said command specifies that said stored data associated with said object are to be recorded.

11. The method of Claim 9 wherein said command specifies that said
5 stored data associated with said object are to be played.

12. The method of Claim 9 wherein said command is for reading from said stored data associated with said object.

10 13. The method of Claim 9 wherein said command is for writing to said stored data associated with said object.

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Cont 14. The method of Claim 1 wherein said mass storage unit is a magnetic disk device.

15 15. A mass storage unit comprising:
medium for storing data representing audio and visual content;
a head positioned adjacent to a surface of said medium such that said data are read to and written from said surface using said head; and

20 a microcontroller for controlling movement of said head;
wherein said microcontroller is for associating an object with said data, deriving a unique object identifier for said object, assigning said unique object identifier to said object and for accessing said object using said unique object identifier, wherein said unique object identifier is not based on a physical
25 location of said stored data within said mass storage unit;

wherein said microcontroller is also for maintaining said object in a hierarchical organization with other objects, said hierarchical organization

including an object list containing said unique object identifier and other unique object identifiers for said other objects.

16. The mass storage unit of Claim 15 wherein said unique object identifier is derived such that said unique object identifier is unique to said mass storage unit.

17. The mass storage unit of Claim 16 wherein said unique object identifier includes an identification number unique to said mass storage unit such that said unique object identifier is unique for a plurality of mass storage units.

18. The mass storage unit of Claim 15 wherein said microcontroller is also for creating a table of contents containing a list of objects associated with data stored on said mass storage unit.

19. The mass storage unit of Claim 15 wherein said hierarchical organization further comprises a first object that is associated with a second object using a unique object identifier for said second object.

20. The mass storage unit of Claim 19 wherein said first object is located using a unique object identifier for said first object and said second object is located using said unique object identifier for said second object.

21. The mass storage unit of Claim 15 wherein said object contains descriptive data for describing said data, wherein said object is located using

said descriptive data.

22. The mass storage unit of Claim 15 wherein said microcontroller is also for accessing said object and executing a command using said object.

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23. The mass storage unit of Claim 22 wherein said command specifies that said stored data associated with said object are to be recorded.

24. The mass storage unit of Claim 22 wherein said command
10 specifies that said stored data associated with said object are to be played.

25. The mass storage unit of Claim 22 wherein said command is for reading from said stored data associated with said object.

15 26. The mass storage unit of Claim 22 wherein said command is for writing to said stored data associated with said object.

27. A mass storage unit comprising:

a storage means for storing data;

20 a data transfer means positioned adjacent to said storage means for reading and writing said data from and to said storage means; and

a microcontroller means for controlling movement of said data transfer means;

25 wherein said microcontroller means is for associating an object with said data, deriving a unique object identifier for said object, assigning said unique object identifier to said object, and accessing said object using said unique object identifier, wherein said unique object identifier is not based on a physical

location of said stored data within said mass storage unit;

wherein said microcontroller means is also for maintaining said object in a hierarchical organization with other objects, said hierarchical organization including an object list containing said unique object identifier and other unique object identifiers for said other objects.

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28. The mass storage unit of Claim 27 wherein said unique object identifier includes a date and time corresponding to when said unique object identifier is derived and an identification number unique to said mass storage unit includes such that said unique object identifier is unique for a plurality of mass storage units.

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29. The mass storage unit of Claim 27 wherein said microcontroller means is also for creating a table of contents containing a list of objects associated with data stored on said mass storage unit.

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30. The mass storage unit of Claim 27 wherein said hierarchical organization further comprises a first object that is associated with a second object using a unique object identifier for said second object.

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31. The mass storage unit of Claim 27 wherein said object contains descriptive data for describing said data.

32. The mass storage unit of Claim 27 wherein said microcontroller means is also for accessing said object and executing a command using said object.

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